IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-24 (canceled).

25. (currently amended) A process for conveying solid silicon-containing particles of irregular geometry to a silicon melt from which solid silicon is produced by crystallization, said silicon-containing particles being selected from the group consisting of fragments of CVD polysilicon rods, fragments of multicrystalline blocks, fragments of silicon single crystals, end pieces of silicon single crystals, fragments of monocrystalline or multicrystalline wafers and mixtures thereof, comprising the steps of:

admixing the solid silicon-containing particles of irregular geometry with solid silicon-containing particles of regular geometry, and

conveying the admixture by means of a gas through a pipe or pipe system having at least one curve, at least one kink, or both at least one curve and at least one kink.

26. (previously presented) Process according to Claim 25, wherein the solid silicon-containing particles of irregular geometry have polygonal geometry.

27. (previously presented) Process according to Claim 25, wherein the particles of regular geometry have spherical or ellipsoid geometry.

28. (previously presented) Process according to Claim 25, wherein the particles of irregular geometry make up about 1% to about 50% of the quantity of particles in the admixture.

29. (previously presented) Process according to Claim 25, wherein the admixture is conveyed by means of fluid packages.

30. (previously presented) Process according to Claim 25, wherein the gas is supplied to the pipe or pipe system in pulses.

31. (previously presented) Process according to Claim 30, wherein the gas is pulsed at regular or irregular intervals.

32. (previously presented) Process according to Claim 25, wherein the particles of irregular geometry have an elongated form with a length L and a width B in a length-to-width ratio of L : B of about $\leq$ 3.

33. (previously presented) Process according to Claim 25, wherein the pipe has a predetermined radius, and the particles of irregular geometry have a maximum length L which is the radius of the pipe.

34. (previously presented) Process according to Claim 25, wherein the particles of irregular geometry are broken silicon material.

Claim 35 (canceled).

36. (previously presented) Process according to Claim 25, additionally comprising doping the silicon melt using doping elements present in the particles of irregular geometry.

37. (previously presented) Process according to Claim 36, wherein the doping elements are at least one of boron, phosphorus, elements of Group III of the Periodic Table and elements of Group V of the Periodic Table.

38. (previously presented) Process according to Claim 25, wherein the silicon melt is doped by admixing highly doped first solid particles of the doping p^+_1, p^+_2, ... p^+_n of doping concentration p^+_i with 1×10^{17} cm^{-3} $\leq p^+_i \leq 1 \times 10^{20}$ cm^{-3}, in quantities m^+_1 bis m^+_n, and second less doped solid particles of the concentrations p_1, p_2, ..., p_m of doping concentration p_j with 1×10^{13} cm^{-3} $\leq p_j \leq 1 \times 10^{17}$ cm^{-3}, in quantities m_1 bis m_m such that a resultant doping of the melt p_r is obtained, according to the equation:

$$\sum_{i=1}^{n} m^+_i p^+_{j=1} \; + \; \sum^{m} m_j p_j \;_{i=1} = p_r \left(\sum_{j=1}^{n} m_i \; + \; \sum^{m} m_j \right) \quad .$$

39. (previously presented) Process according to Claim 25, wherein the admixture is accelerated in at least one section of the pipe or pipe system.

40. (previously presented) Process according to Claim 25, wherein the admixture is conveyed through a pipe passing through the center of the melt or being concentrically surrounded thereby, wherein the solid particles of the admixture are deflected toward a surrounding container by a deflecting element arranged above the pipe and having a conical geometry, and wherein the solid particles of the admixture are passed into the melt by a baffle element surrounding the pipe, passing around the outer edge in an area of the melt and having a spherical surface section geometry.

41. (previously presented) Process according to Claim 25, wherein the conveying gas is selected from the group consisting of compressed air, nitrogen, argon, carbon dioxide and mixture thereof.

42. (previously presented) Process according to Claim 25, wherein silicon wafers are manufactured from the melt using the Edge-Defined Film-Fed Growth process.

43. (previously presented) Process according to Claim 40, wherein the deflecting element having a conical geometry and the baffle element are geometrically adapted to morphology and mixing ratio of the solid particles in the admixture.

44. (previously presented) Process according to Claim 40, wherein the temperature of at least one of the baffle and the deflecting element is set in the range between 300°C and 1200°C.

4

45. (previously presented) Process according to Claim 40, wherein the deflecting element having a conical geometry has an opening angle α of $30° \leq \alpha \leq 60°$, and a base having a diameter d, and the baffle element has a base having a diameter D with $0.2 \leq d/D \leq 0.8$.